the consequence of regulatory policies, the remedy is not necessarily competition, some undeterminable proportion of which, responding to those distorted price signals, is doubtless inefficient, but reform of those regulatory policies.

In proffered rebuttal of our earlier comments on his first Affidavit that his recommendations would give the major IXCs a strong incentive to be uncooperative in negotiating with the BOCs, because that would delay the latter companies' entry into competition with them, he observes that, "to his knowledge," local competitive entry has been no more pervasive in SNET and GTE territories, where those ILECs already have interLATA authority and the IXCs would, under our reasoning, have no incentive to engage in dilatory tactics in negotiating with them. To this rejoinder, there are several responses: (1) Following Professor Schwartz's own reasoning—to the effect that once long-distance entry is permitted an ILEC, it would have reduced incentives to cooperate in opening its local markets—we would expect to see significantly less progress in the introduction of local competition in GTE and SNET than in RBOC territories. Yet he makes no such claim. (2) If Professor Schwartz's "understanding" is correct with respect to GTE, it would probably be because of that company's typically rural and suburban service territories, where competitive entry is far less attractive, precisely because of the distorting regulatory policies to which we have already alluded. (3) So far as the experience in Connecticut is concerned, it seems to be true that, despite that state being at the very forefront in seeking to open the local telephone business to competition, and some 36 applications to offer such

apparently been modest ⁶³ The relevant question, apart from remaining uncertainties about the facts, is one of responsibility. While AT&T and MCI publicly "blame SNET for sabotaging the quality of its service," ⁶⁴ an AT&T witness has in regulatory proceedings in that state explicitly praised SNET for its cooperativeness and good faith efforts to establish conditions for CLEC entry. ⁶⁵ and a witness for TCG testified there that in his Company's experience SNET had been the most cooperative of all the ILECs in the country in those negotiations ⁶⁶—both of these encomia for a company that already had interLATA authority and therefore in flat rebuttal of the rationale for the strategy advocated by Professor Schwartz and his DOJ client. The Company, proclaiming its good faith efforts, protests first, that it was geared to handle 10,000 orders a week for resales but never received more than

⁶² Joan Muller, "Back to the future: SNET still dominates," The Boston Globe, January 21, 1998, p. D1, D16.

According to the Company, it has lost a considerably larger share of the market than would be suggested by the statement in Muller, *loc. cit.*, that SNET still "controls 99 percent of the phone lines in the state." In view of the availability to competitors (in theory at least) of the option of leasing SNET's lines, it is not clear whether that percentage accurately reflects the incumbent company's share of the market defined in terms of the number of customers. Since the implied 1 percent of lines in the hands of CLECs are almost certainly concentrated in metropolitan business districts, their share of total revenues would presumably be several times higher.

⁶⁴ Muller, op. cit.

Q. As I understand AT&T has recently provided a forecast to SNET. Without divulging numbers has SNET stated in any way that they will not be able to handle the amount of orders that AT&T has forecasted?

A. No, they have not.

Q. In fact, isn't it true, Mr. Curran, that AT&T has sent pretty nice complimentary letters to SNET on behalf of the work they have done?

A. There has been some exemplary work between the companies in terms of cooperation and we thank you for that

Testimony of Kevin Curran. Connecticut Department of Public Utility Control Docket No. 94-10-05. April 3, 1997, Transcript pp. 501-502.

- 3,000—an assertion confirmed by a DPUC Commissioner; and that the task of preparing operations support systems capable of permitting its competitors to order electronically transfers of customers and their provisioning, repair, billing services has proved to be far more difficult than anyone had anticipated.
- Professor Schwartz claims that advocates of RBOC entry have overstated the extent to which prices would drop if that were to occur. He appears to be satisfied that recent IXC offerings, which even according to him are at least 10 cents per minute, do not leave much room for large price reductions. Yet in the case of intraLATA competition, he cites claims of prices as low as 3 cents after presubscription had been ordered. Because long-distance costs are not very distance-sensitive, the potential for price reduction should be similar for interLATA services. Therefore, if his intraLATA figure is accurate, current IXC interLATA prices leave considerable room for erosion in consequence of RBOC entry, and, as we have already pointed out, his contention to the contrary notwithstanding, the RBOCs would have strong incentives to offer substantial discounts to break into that market, just as the IXCs have done when first offering intraLATA service—witness AT&T's 5 cents a minute offering in Connecticut. (See our reference to the SNET experience, in par 76, below.)
- 72. In contradiction of the basic rationale of the Telecommunication Act, which is to leave the outcome to the competitive market (subject to the antitrust-like protections incorporated in the Act), the rationale of the Justice Department's proposal is essentially

⁶⁶ The witness was Paul Karoupas, now TCG's Vice President for regulatory and external affairs. Information from the Connecticut Department of Public Utility Control

regulatory. Rather than requiring regulators to satisfy themselves only that "the requisite arrangements necessary to open the local market are made available" (Schwartz Affidavit, par 70, stress supplied), as the statute stipulates, it would require them additionally to assess the degree to which that availability has proved effective—that is, whether "meaningful local competition" has "emerged," and, if not, "why" (pars. 20, 80)—both complicated questions that Congress wisely intended to head off by establishing specific criteria for open markets in the checklist. This is clearly a rationalization for continuing micromanagement of a process that, Professor Schwartz and we agree, Congress intended to deregulate.

73. In his Supplemental Affidavit, Professor Schwartz disputes our contention that his proposals constitute micromanagement, claiming instead that they will lead to less, rather than more regulation. We stand by our assessment. He has clearly proposed an additional, results-oriented standard that would provide the occasion for additional jousting before regulatory commissions such as we have already described, including assertions such as the IXCs have already been making that the only "meaningful" competition would be facilitiesbased—thereby giving them an additional reason to continue their own policies of emphasizing entry, instead, by using the facilities of the incumbent LECs (another Catch 22). For example, despite the enormous amount of time, effort, and money that ILECs have already expended in accommodating unbundling and resale and negotiating with CLECs⁶⁷—resulting in 1700 agreements as of late November 1997, according to the count of the U.S. Telephone Association (46 of them in Oklahoma, SWB tells us)—Professor Schwartz believes that RBOCs "would fight every requirement" (par. 42) imposed to open their markets. Given his belief that (1) some entrants will depend on unbundled elements well into the future and (2) ILECs will be prone to discriminate in new access arrangements (par 70).⁶⁸ the inescapable conclusion would seem to be pervasive regulation as far as the eye can see. And with it would go the endless disputes over whether the RBOCs have gone far enough to satisfy the desires of competitors seeking the most favorable possible deals and regulators under strong pressure to produce results in the form of visible competitors

C. Successful Competition between Vertically Integrated RBOCs and Firms Requiring Access to Their Facilities in Other Markets

There has accumulated, over the last decade or more, a great deal of actual experience with competition between the RBOCs—and LECs that are not BOCs—on the one side, and rivals dependent on access to their facilities. An ounce of actual experience is surely weightier than a pound of speculation about possible misdeeds or, indeed, of anecdotal claims about exclusionary practices. Assertions about the theoretical inadequacies of regulatory safeguards against predation, cross-subsidy and discriminatory treatment of competitors simply ignore this historical evidence. In practice, competition by non-vertically integrated firms with RBOC "bottleneck monopolies" has already succeeded in other telecommunications markets that are at least as susceptible to anti-competitive tactics as the interLATA market—geographic corridors in which the BOCs have been permitted to offer interLATA service, cellular, paging, voice messaging services (VMS), customer premises equipment (CPE), intraLATA long distance and the offer of long-distance service by LECs other than BOCs.

⁶⁷ SBC informs us that it has already spent \$1.2 billion to accommodate local competition.

⁶⁸ Thus, like other commentators. Professor Schwartz has ignored the extended history of successful competition with vertically integrated RBOCs that we describe below

for International experience lends further support to the argument that regulatory safeguards are effective. While the United States was clearly the leader in opening long-distance markets to competition, it has been alone in requiring divestiture and quarantine. And yet, despite their having removed their barriers to entry into those markets well after the United States had done so and despite their having permitted the providers of essential

1. InterLATA corridor traffic

RBOCs have routinely provided interLATA services since divestiture under exceptions to the AT&T consent decree, the notable example of which is Bell Atlantic's interLATA service between New York and New Jersey. In that narrow market, the RBOC offers rates about 20 to 30 percent below AT&T's, 70 yet it has only a small share of this traffic, despite purported overwhelming advantages stemming from its control over local service. 71 Over ten years have passed without adverse consequences for competition. 72

2. InterLATA service offerings by non-BOC LECs

Telephone (now Frontier), have similarly offered interLATA services without apparent anti-competitive effect. The SNET experience in Connecticut is quite informative. SNET began offering out-of-state service in April 1994 at rates 15 and 25 percent below AT&T's

local exchange services to continue to offer the newly competitive services, toll competition has made substantial progress in other countries. For example, the incumbents in Canada have lost more market share since competition was authorized in 1992 than occurred in the United States over the comparable period after 1984. Similarly, three facilities-based carriers have captured over 30 percent of the Japanese long-distance market since 1987, despite the fact that the incumbent NTT remains vertically integrated. Willie Grieve and Stanford L. Levin, "Telecom Competition in Canada and the U.S.: The Tortoise and the Hare," *Nelected Papers from the 25th Annual Telecommunications Policy Research Conference*. Alexandria, VA, September 27-29, 1997. Likewise, Spiller and Cardilli report that facilities-based *local* competition has progressed at a healthy pace in the smaller countries they examined (Australia, Chile, Guatemala and New Zealand), even though none of these countries has the extensive unbundling requirements for an indefinite duration that prevail in the United States or has prevented incumbents from vertically integrating. Pablo T. Spiller and Carlo G. Cardilli, "The Frontier of Telecommunications Deregulation: Small Countries Leading the Pack." *The Journal of Economic Perspectives*, Vol. 11 (1997), pp. 127-138

⁷⁰ "Bell Atlantic Seeks Nondominant Status in "Corridor" "Telecommunications Reports, July 17, 1995.

The same is true of NYNEX (now part of Bell Atlantic). The fact that these two RBOCS serve corridor traffic only through 10XXX access may explain their relatively small shares in their respective corridor areas.

That the FCC is of the opinion that anti-competitive behavior has not been a problem in these markets is suggested by the fact that when, in September 1990, it placed these interLATA services provided by LECs under price caps, it elected not to subject them to price floors, as it had in other such situations.

Joint Affidavit of Robert Crandall and Leonard Waverman on Behalf of Ameritech Michigan. In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region InterLATA Services in Michigan. FCC CC Docket No. 97-1. Vol. 3.1, January 2, 1997, pars 53-54.

undiscounted rates for peak and off-peak calling respectively. By the end of 1996, it had captured about 30 percent of the market, thereby providing large benefits to consumers in the form of lower prices and new service offerings. For all the reasons we have already summarized, Southwestern Bell's entry into interLATA service may confidently be expected similarly to benefit consumers, without denying its rivals a fair opportunity to meet that competition.

3. Cellular

The service is organized as a (largely) unregulated duopoly in the United States, with entry limited by the availability of only two 25 MHz channels in each geographic market. At its inception, one channel was allocated to wireline carriers (generally a BOC or GTE) and the other to non-wireline providers. The simple fact is that the wireline licensees (the LECs) have not come to dominate the market, as would have happened if they had been able to subsidize these services from their local telephone services or otherwise discriminate against their competitors. Despite a late start, non-wireline suppliers have nearly equal market shares. Indeed, the largest cellular company in the U.S. is AT&T/McCaw, a non-wireline supplier, and seven of the top ten companies ranked by the ratios of subscribers to population covered are not BOCs.

Paul Kagan Associates, "Cellular Ownership," Wireless Market Stats, August 31, 1995, No. 72; and Donaldson, Lufkin & Jenrette, *The Wireless Communications Industry*, Table 2A; Cellular Industry - Quarterly Subscribers, Summer 1996, p. 10.

⁷⁵ Paul Kagan Associates. "Cellular Industry Eclipses Projections (Again)." Wireless Telecom Investor. March 14, 1994, No. 73.

- In rebuttal testimony in response to the 1997 271 application of SBC Communications Inc., et al. in this state, ⁷⁶ Professor Robert E. Hall dismisses this record of successful cellular competition with the incumbent LECs on the ground that only a finite amount of spectrum has been assigned to that service. That fact would be relevant if its effect were to limit the ability of the two certificated incumbent carriers to take on additional business, either individually or collectively. The fact is, however, that the expansion of cellular service has *not* been substantially capacity-constrained. On the contrary, the growth in subscribership has averaged over 40 percent annually, stimulated in important measure by competing promotional offerings by the wireline and wireless rivals.
- 79. Perhaps the best evidence, however, that participation by SBC and other incumbent LECs in the cellular business does not foreclose competition comes from the wireline carriers themselves. Though they are presumably most knowledgeable about the real risks of anti-competitive conduct directed at them by the incumbent wireline carriers, the number of territories in which telephone company cellular affiliates compete with one another has grown rapidly from about 5 in 1986 to more than 30 in 1995. And a company as knowledgeable and sophisticated as AT&T has sunk billions into this market through its purchase of McCaw and PCS licenses—powerful objective evidence that its frequently expressed concern about LECs discriminating against it, in favor of their cellular affiliates in their home territories, has not deterred it from entering into competition with them

Affidavit on Behalf of MCI. In the Matter of Application by SBC Communications Inc. for Authorization Under Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in the State of Oklahoma. CC Docket No. 97-121, pp. 41-42.

The 1995 number reflects direct competition among the former BOCs except for Pacific Telesis, which spun off its cellular company (now known as AirTouch Cellular)

4. Paging

Paging markets tell a similar story. While LECs have been important participants, they have always been far from dominant. The largest suppliers, Paging Network and MobileMedia, are not affiliated with an LEC and another large firm, SkyTel, became the first to introduce two-way paging (in September 1995). All told, radio common carriers provide the largest share of these services, LEC affiliates account for only about 20 percent of the total. The paging market is characterized by successful entry (SkyTel's satellite service in 1987) and exit (MCI's sale of its paging and cellular interests to McCaw in 1986, NYNEX's sale to Page America in 1990 and MobileMedia's acquisition of BellSouth's paging subsidiary in January 9678). Again, however, concerns that the LECs might cross-subsidize their offerings of these competitive services or otherwise exercise their control of local facilities to obstruct their rivals have proved unfounded, many years of competition have not eventuated in their dominating the business.

5. Voice Messaging Service (VMS)

81. Many LECs have long been allowed to provide information services, and SBC and the other BOCs also have been allowed to enter those markets in recent years—all without evidence that competition has been undermined ⁷⁹ Since the BOCs and GTE began offering VMS, consumers have benefited in at least two ways. First, the monthly charge has dropped from \$30 in 1990 to \$5-\$15 in 1995. Second, the LECs began offering VMS to residential and

^{*8} "M&A: MobilMedia Corp.," Telecommunications Reports, January 8, 1996.

⁷⁹ In addition, the FCC has ruled that the Open Network Architecture (ONA) safeguards are sufficient to deter conduct that has been alleged to be anticompetitive in the past. (Bell Operating Companies Joint Petition for Waiver of Computer II Rules, Order, 10 FCC Red. 13764, 1995, par. 32.

³⁰ J.A. Hausman and T.J. Tardiff, "Benefits and Costs of Vertical Integration of Basic and Enhanced Telecommunications Services," prepared for filing with the Federal Communications Commission, Computer

small business customers, a thitherto untapped market segment. In five years, the BOCs' participation in this market increased from zero to over six million subscriptions, yet competitors have thrived and the BOCs and GTE together account for just over 15 percent of the total revenues nationally.⁸¹

6. Customer premises equipment

82. Though barred from manufacturing, SBC and the other BOCs have been permitted to distribute CPE. As in the case of interLATA toll, competitors of the BOC must interconnect with the incumbent's network—typically in the form of connecting to a BOC-provided access line. There is no evidence—nor have there, to our knowledge, been even assertions—that they have attempted by exercising their market power, to exclude competitors, 82 let alone succeeded. Indeed, their collective market share of CPE distribution is small, on the order of 10 percent. 83

7. IntraLATA toll

83. The final and most directly relevant evidence is to be found in intraLATA long distance. Nearly all states permit intraLATA toll competition; and in none of them have SBC and the other LECs been required to divest themselves of their toll businesses or even to create separate subsidiaries. When the IXCs entered these markets, they (i) started with small initial market shares, (ii) had few facilities within the LATA, so that they were heavily dependent on the LECs for access to subscribers. (iii) did not have complete dialing parity, and (iv) had to

III Further Remand Proceedings. CC Docket No. 95-20, on behalf of Bell Atlantic, Bell South, NYNEX, Pacific Bell, Southwestern Bell, and U.S. West, April 6, 1995.

⁸¹ *Ibid.*, pp. 5, 10.

NERA staff reviewed complaints filed against the BOCs with the FCC between 1985 and 1991 and found no complaints about the offering of interconnection of CPE.

compete against inexpensive local calling within the LATA and overcome initial ignorance on the part of subscribers that they now had a choice of intraLATA long distance providers. Even under these circumstances, LECs are losing significant amounts of market share, particularly for large business customers that combine interLATA and intraLATA traffic on the same dedicated facilities. Despite the fact that dialing parity has not been universally required, the IXCs have already captured 22 percent of that market nationwide. (Schwartz Affidavit, p. 11, see ftn. 4). This amount of market share loss by incumbents is comparable to AT&T's in the interLATA market by 1988 (four years after divestiture) and is all the more remarkable in light of the fact that intraLATA toll competition was not even authorized in the two largest states, which account for 46 percent of all such calling (California and New Jersey), until 1995. The success of competition for long distance intraLATA business is strong evidence that the hypothetical dangers of discriminatory treatment of BOC affiliates and their competitors are in fact adequately precluded by existing regulatory safeguards.

In his Supplemental Affidavit. Professor Schwartz implies that we missed the point of his discussion of intraLATA toll—namely, that it has been an example of intentional ILEC foot-dragging in the form of opposition to presubscription. Since we testified on behalf of some of the RBOCs in support of their position, we can assert with authority that the sole basis of their opposition was that it would upset the symmetrical arrangement under the MFJ that reserved the intraLATA market for them while excluding them from the interLATA. The Telecommunications Act decisively endorsed that position, linking intraLATA presubscription with the lifting of the ban on the RBOCs' offer of interLATA service. Moreover, Professor Schwartz's emphasis on the importance of presubscription—a proposition with which we

⁸³ NATA, 1991 Telecommunications Market Review and Forecast, p. 60

agree—underscores the validity of the point we were making and repeat here—the ability of the IXCs, in a short period of years, to "capture 22% of that market nationwide"—even without presubscription—is a powerful rebuttal to his general proposition that if the RBOCs were permitted to provide interLATA service, they would use their local monopolies to impede competition.

V. THE IMPORTANCE OF SYMMETRY IN EXTENDING THE FREEDOM TO COMPETE

As we have already observed, the provision in the Telecommunications Act prohibiting joint marketing of local exchange and interexchange services by major IXCs (carriers serving more than 5 percent of the nation's lines) that resell the incumbents' local exchange services until such time as the incumbent LECs qualify for interLATA entry—at which time, both they and all competitors would be permitted to market services jointly—is clearly intended to preserve competitive parity between those two—It also reflects the extent to which the markets for the several telecommunications services are converging and the necessity, if all participants are to compete on equal terms, for all to have equal freedom to bundle their various services and offer customers one-stop shopping

A. Blurring of Boundaries between Markets; the Importance of One-Stop Shopping

86. The industry has reacted to the recent dramatic technological and regulatory changes with a kaleidoscopic variety of new ventures, typically involving entry into other markets, preexisting and new—sometimes by companies operating alone, at other times through partnerships or acquisitions—as each attempts to take advantage of these exploding opportunities (or perceived opportunities). All give rise to the prospect of competition among

While, as we have observed, a main strategy, since passage of the Telecommunications Act, has been to negotiate entry into local markets by reselling the services and using the facilities of the ILECs, the three major IXCs have made large commitments of capital as well—preponderantly in wireless and in service to business customers in concentrated metropolitan areas. AT&T's purchase of McCaw Cellular allowed it access to local networks covering about half of the United States and it has strengthened its position in these areas by winning licenses in 21 major markets in the recent PCS auctions, with bids totaling approximately \$1.7 billion. AT&T has also explored alliances with such small non-Bell local providers as Metropolitan Fiber Systems, as well as cable companies, such as Time Warner, and it has recently announced its intention to acquire Teleport, one of the largest operating CLECs. In terms of local wire services, AT&T states that it already has installed "more than 100 local switches and special computers for routing traffic." to this would be added Teleport's 41.

AT&T last year announced a new wireless system that would link customers directly to its network. According to a recent article, "The system, which consists of a small transceiver mounted on the side of a house, could give AT&T lightening-fast entry into the local phone business," John J. Keller, "AT&T Unveils New Wireless System Linking Home Phones to Its Network," *The Wall Street Journal*, February 26, 1997, p. B4. Gregory Rosston, then the FCC's Deputy Chief Economist, commented on this development as follows: "AT&T Corp. recently announced that it is developing PCS technology to be what Chairman Reed Hundt has termed the 'Raiders of the Local Loop," RCR, March 3, 1997, p. 59

^{85 &}quot;AT&T Vows Battle to Offer Local Service." The Wall Street Journal, October 27, 1995, p. A4

May 16, 1995, p. A3. Additionally, AT&T has filed plans with the FCC to bypass local connections, using an advanced satellite communications system. B. Ziegler, J. Cole, Q. Hardy, "Satellite Plan Would Let AT&T Bypass Local Networks," The Wall Street Journal, October 5, 1995, p. A6

On the other hand, as but one prominent illustration of the rapidity with which these plans change. TCI—the country's largest cable operator—has signaled its intention to abandon its previously announced ambitious plans to offer telephone services, "Malone Says TCI Push into Phones, Internet, Isn't Working for Now," *The Wall Street Journal*, January 2, 1997, p. A1

Robert Allen, AT&T's chairman, stated on February 8, the day the Telecommunications Act became law, that it had the ability to directly connect its large business customers to offer local exchange service. It helps put the 100 switches into perspective to point out that the RBOCs currently have about 6,000 switches (not including remotes). On the other hand, because (1) the switches of new local exchange entrants are likely to be

87. MCI and Sprint also have made major commitments to entering the local market. bypassing LEC facilities—almost exclusively, again, in wireless and concentrated business markets. 89 MCI first entered into a partnership with British Telecom, which involved an infusion of \$4.3 billions of BT capital. Most recently, it announced its intended merger with WorldCom, which should, among other things, strengthen its local exchange presence, because of WorldCom's ownership of the largest operating CLEC, MFS. Sprint has joined with cable companies in a number of areas to offer basic telephone service through a joint wireless/wireline strategy. 91 and, although it recently spun off its cellular holdings, it has not abandoned vertical integration with wireless services. Instead, like Pacific Telesis (recently joined with Southwestern Bell) previously and U S West recently, Sprint has evidently opted for the newer generation PCS as its main wireless platform, as its aggressive recent advertising campaign attests. Sprint has also entered into partnership with Deutsche Telekom and France Telecom, which will allow the European firms to obtain a large jump-start in the United States market and allow Sprint to do the same in Europe. The apparent plan is for each to own a one-third share in

placed in areas with higher volumes and (2) such entrants will be able to obtain unbundled switching from the ILECs, this simple comparison of the respective numbers understates their importance.

⁸⁸ Fitch IBCA, Inc., "Teleport Purchase Near-term Credit Negative for AT&T." January 14, 1998.

MCI's web page reports investments of \$1.7 billion over the last three years, which have resulted in provision of local service to large businesses in 21 major markets, plus residential service in California and Illinois. Considering the discrepancy between local prices and costs and the lack of full resolution of this problem through rate rebalancing and universal service funding reform. MCI's pattern of investment in the apparently most lucrative areas is not surprising.

^{90 &}quot;BT Agrees to Invest \$4.3 Billion for 20% of MC1 New Joint Venture," Telecommunications Reports, June 7, 1993.

The trade press recently reported that there would be a limited delay in Sprint Spectrum's plans to offer local wireline services through upgraded cable facilities: "Sprint in probably won't rely on networks owned by Tele-Communications Inc., Comcast, and Cox Communications until the second wave of [PCS] rollouts scheduled later this year." (Vince Vittore, "Sprint PCS Launches in 6 More Markets," Cable World, March 3, 1997.)

a joint venture, Phoenix, aimed at serving the multibillion-dollar global communications market. 92

- 88. Other firms similarly compete for position in these existing and emerging markets. Besides MCI and AT&T, there are numerous other facilities-based carriers entering local exchange markets. A recent article reports that as of the end of 1996, 27 CLECs (including MCImetro) had installed 139 switches throughout the U.S.⁹³ In addition, there are at least 23 ventures by electric utilities into telecommunications, making use of their rights-of-way, excess fiber capacity⁹⁴ and large capital reserves, which make the telephone and/or cable markets appealing to them. ⁹⁵
- 89. These investments, partnerships and market interpenetrations are powerfully impelled by potential economies on both the demand and the supply sides. The former spring from the attractiveness to consumers of one-stop shopping—purchasing expanding bundles of services, at attractive prices, from single, familiar suppliers. On the supply side, there are ubiquitous promised economies of scale and scope. The greater the capacity of switches and transport facilities, the lower are unit costs: this means the incremental costs of adding capacity are lower than average costs. Similarly, the use of common facilities permits the offer of additional services at incremental costs much lower than if they had to be provided on a stand-

^{92 &}quot;With Variations, Sprint Announces European Pact, "The New York Times, Late Edition, Friday, June 23, 1995, p. D2.

⁹³ Joan Engebreston, "The New Guys in Town," Telephony, June 2, 1997, pp. 98-110.

⁹⁴ For example, SCANA Corp., the parent company of South Carolina Gas and Electric, currently controls 2,500 route miles of cable fiber through its subsidiary MPX Systems. Inc., and is planning to double that, "Growing Utility Fiber Market Tempered by Considerable Hesitancy," *Fiber Optics News*, Vol. 15, No. 19, May 15, 1995.

One of us has listed these 23 in testimony on behalf of Boston Edison before the Massachusetts Department of Public Utilities in D.P.U. 97-96. Code of Conduct. November 21, 1997. Appendix Table 2

alone basis. Entry into new lines of business at rates above those low incremental costs provides the opportunity to earn contribution toward common and fixed costs and profits.

- 90. These economies have a dynamic as well as a static aspect. Complementary goods become more plentiful and of higher quality as the number of users of any one of them—such as basic telephone service—increases. Since consumers seem to prefer the supplier of communications services that gives them access to the largest number of complementary services—internet access, information services, database access, video on demand—there is a very strong incentive for the various participants in this industry, once freed from legal and regulatory barriers, to compete in developing these new bundles of services.
- 91. Until recently, there had been (1) increasing expressions of concern that the pace of local competition had been very slow, accompanied by (2) complaints, mainly by the IXCs, that the major impediment had been foot-dragging by the ILECs in making the necessary interconnection arrangements with their challengers. Both AT&T and MCI complained also of the high costs of their previously announced ambitious plans of large scale entry on a facilities basis; the sharp reduction in the price British Telecom was to have paid for MCI and uncertainty about changes in AT&T's top management and company strategy were some symptoms of this more pessimistic prospect. These various problems appear to be in process of resolution AT&T changed its top management, announced its intention to refocus its local entry strategy in the direction of using its own facilities, along with unbundled elements of the ILECs, and has given that announcement credibility by its proposed acquisition of Teleport, just as MCI's announced merger with WorldCom appears to strengthen its local exchange capabilities. Whether any of these efforts reflects a serious intention by the IXCs to serve the residential

market with terrestrial facilities 6-whether, indeed, such an effort would make sense even if basic residential services were not grossly underpriced—must remain a subject of profound skepticism.

92. As for the allegations of ILEC culpability, we have already pointed to the 1700 negotiated interconnection agreements as of November 1997—46 of them in Oklahoma. This is a remarkable achievement in light of the complexity of these negotiations and the fact that the process is barely a year and a half old.

B. The Adverse Consequences of Asymmetrical Restrictions on the Ability to Compete Reciprocally

- 93. As a general proposition, asymmetrical regulation attenuates both the incentives and the ability of some providers to avail themselves of these scope and scale economies and to pass the benefits on to their customers under the pressures of competition. As a result, large benefits are lost and costs incurred. 97 Specifically.
 - Stifling the incentives of RBOCs to offer new services costs society billions of dollars annually in lost consumer benefits
 - As we have already observed, "one-stop shopping" can be worth a substantial part of the total value of a product or service to consumers; competitors that can offer it have a considerable competitive advantage over those than cannot 98

⁹⁶ Significantly, in view of our previous references to the experience in Connecticut, the only substantial competitors of SNET in that market are TCI. Cox and Cablevision—because, of course, their cable already passes by the majority of residences in the State.

⁹ Hausman and Tardiff, op. cit.

⁹⁸ See for example, "Study Says Consumers Would Buy Bundled Services," Telecommunications Reports, August 12, 1996. That article reports that almost 80 percent of U.S. households would buy bundled services from a single provider. Other studies have quantified the value of "one-stop shopping" to consumers. For example, see Testimony of Arthur T. Smith on behalf of Southern Bell. Docket No. 930330-TP (Fla P S.C July 1, 1994). This preference for one-stop shopping cuts across cultures: a study of Japanese consumers has

- The sacrifices of scope economies entails artificially inflated production costs.
- 94. The upgrading and modernization of the switched public network and the fullest exploitation of its capability of offering a variety of sophisticated and innovative services—which are the central goals of the Telecommunications Reform Act—depend not just on freeing the telephone companies and all others from restrictions and handicaps on their ability to do so, it also requires offering all parties the full, undiluted incentives of a free market system to undertake the requisite, typically risky investments
- The strongest case for substituting the discipline of competition for that of regulation is the superior ability of the former to exert pressures on all producers to be efficient and innovative, if they are to survive, let alone prosper. The second is the self-interest of the telephone companies, freed from continuing restrictions on the services they are permitted to offer.
- 96. Particularly during the next several years, when we will necessarily continue to depend very heavily on the ILECs for accelerating the deployment of an advanced telecommunications infrastructure, it is essential that we not weaken the second of these incentives in a misguided effort to strengthen the first. Attempts to micromanage the process of deregulation, we have found in other industries, are more likely to produce distortions than actually to encourage efficient competition. Ultimately, both incentive systems require the shrinking of regulation and of all such regulatory restrictions to the absolute minimum and entrusting protection of the public to deregulated competition—subject, as always, to the

estimated the value of the ability to obtain calling services from a single provider at about 14 percent of the average price. Timothy J. Tardiff, "The Effects of Presubscription and Other Attributes on Long-Distance Carrier Choice," *Information Economics and Policy*, Vol. 7, 1995, pp. 353-366.

⁹⁹ Alfred E. Kahn, "Applications of Economics to an Imperfect World," the Richard T. Ely lecture. *The American Economic Review, Papers and Proceedings.* Vol. 69, No. 2, May 1979, pp. 1-13.

constraints of the antitrust laws. But in the interim, delay in allowing Southwestern Bell and the other RBOCs the opportunity to offer both local and interexchange services is not only unnecessary to preserve equal competitive opportunities for equally efficient rivals. It would be blatantly anti-competitive, because it would unnecessarily deny Southwestern Bell the ability to offer the same combinations of services, exploiting the same economies of scope, as both Congress and the FCC have taken extraordinary pains to ensure will be available to their competitors. And by weakening both the ability and the incentives of the BOCs to invest in modern infrastructure and to innovate, it will tend to frustrate achievement of a central goal of the Act.

VI. SUMMARY AND CONCLUSIONS

- 97. The presumption in any system that is supposed to be governed by competition must be in favor of permitting companies to enter whatever markets they want to enter, by integration or otherwise.
- The desire of the BOCs to have the restriction on their ability to offer interLATA service lifted is a desire to compete that is clearly the place to begin in assessing their petitions. What they are asking for permission to do is to integrate—to extend their operations from the supply of the "raw material"—local access—into the supply of one of the major end-services making use of that input. Vertical integration of this kind is most likely to recommend itself to companies—and, by the same token, to be socially creative and competitive in its effects—when it represents a fuller use of existing capabilities—equipment, knowledge, managerial capabilities, marketing facilities—of the integrating firm—that is to say, when it represents a fuller exploitation of potential economies of scope

99. That is undeniably the case here—Subject to the Act and the FCC's Interconnection Order, the same Southwestern Bell facilities—switches, transport facilities, marketing operations—as provide local exchange and intraLATA toll services can also supply long-distance services, which, packaged with the others, are much more attractive to consumers than each or only some of them supplied separately. For exactly the same reasons, long-distance companies, cable and cellular operators are eager to use their existing capabilities and facilities to add local telephone services to their offerings. Integration in both directions would, manifestly, be competitive.

100. The ultimate economic question is whether Southwestern Bell and the other BOCs can possibly, by the exercise of such diminishing but residual monopoly power at the local level as they possess, succeed in suppressing competition as an effective force in the market they wish to enter—suppress competition, that is to say, as contrasted with discommoding competitors. And this leads to our final and in a real sense definitive point. We find the ultimate essential component of the successful strategy of cross-subsidization, predation or exclusionary tactics hypothesized by opponents of BOC entry into the interLATA market—namely, the permanent removal or disabling of competitors sufficient to enable the predator to recover the costs of those cross-subsidizations or other schemes by raising prices—flatly inconceivable The incumbent long-distance providers are in command of 100 percent of the market. They have installed capacity that is not going to go away. The marginal cost of operating it is low. leaving its owners with latitude for matching price reductions more than sufficient to dissuade any would-be predator. It is the present long-distance companies that are the dominant firms in that market. In these circumstances, we find it simply inconceivable that they would or could either be driven out of business or be so debilitated by discriminatory tactics that might,

hypothetically, be employed by the BOCs as to weaken the protection afforded consumers by their continued competitive presence. In these circumstances, entry by Southwestern Bell and the other RBOCs could only be beneficial *to consumers* in the interLATA market.

The Telecommunications Act, however, seeks also to encourage competition at the local level for its own sake and not merely to ensure fair competition in the interLATA market. Setting aside the legal consideration that that was not the purpose of the MFJ, which singled out the Bell successor companies, and therefore no more justifies retaining the special MFJ-imposed restraints on them than imposing them afresh on all other ILECs, the Act seeks to achieve this goal by requiring the RBOCs to make the stipulated required tools *available* to rivals. The extension of that precondition recommended by the Department of Justice, however, could well be counterproductive, even in terms of the achievement of that separate goal of local competition, because it offers the incumbent interexchange carriers additional pretexts and inducements to refrain from negotiating in good faith the necessary conditions of their entry—as the evidence we have cited suggests it has done—while unjustifiably extending the period during which consumers are denied the benefits of additional competition in the offer of interLATA services.

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Professor Kahn is the Robert Julius Thorne Professor of Political Economy, Emeritus, at Cornell University and a Special Consultant to NERA.

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Professor Kahn received his Bachelor's and Master's degrees from New York University and a Doctorate in Economics from Yale University. Following service in the Army, he served as Chairman of the Department of Economics at Ripon College, Wisconsin. He moved to the Department of Economics at Cornell University, where he remained until he took leave to assume the Chairmanship of the New York Public Service Commission. During his tenure at Cornell, Professor Kahn served as Chairman of the Department of Economics, member of the Board of Trustees of the University and Dean of the College of Arts and Sciences.

Throughout his career, Professor Kahn has served on a variety of public and private boards and commissions including: the Attorney General's National Committee to Study the Antitrust Laws; the senior staff of the President's Council of Economic Advisors; the Economic Advisory Council of American Telephone & Telegraph Company; the National Academy of Sciences Advisory Review Committee on Sulfur Dioxide Emissions; the Environmental Advisory Committee of the Federal Energy Administration; the Public Advisory Board of the Electric Power Research Institute; the Board of Directors of the New York State Energy Research and Development Authority; the Executive Committee of the National Association of Regulatory Utility Commissioners; the National Commission for Review of Antitrust Laws and Procedures; the New York State Council on Fiscal and Economic Priorities; the Governor of New York's Fact-Finding Panel on Long Island Lighting Company's Nuclear Power Plant at Shoreham, L.I.; the Governor of New York's Advisory Committee on Public Power for Long Island; the National Governing Board of Common Cause; and, in 1990, as Chairman of the International Institute for Applied Systems Analysis Advisory Committee on Price Reform and Competition in the USSR.

He has also served as a court-appointed expert in State of New York v. Kraft General Foods, Inc., et al., U.S. Disctrict Court, S.D.N.Y.; Advisor to New York Governor Carey on

Telecommunications Policy; and as a consultant to the Attorneys General of New York, Pennsylvania and Illinois, the Ford Foundation, the National Commission on Food Marketing, Federal Trade Commission, Antitrust Division of the Department of Justice, the U.S. Department of Agriculture and the City of Denver on charging and financing of Stapleton Airport.

He has received L.L.D. honorary degrees from Colby College, Ripon College, Northwestern University, the University of Massachusetts and Colgate University, and an honorary D.H.L. from the State University of New York, Albany; he also received the Distinguished Transportation Research Award of the Transportation Board Forum, The Alumni Achievement Award of New York University, the award of the American Economic Association's Transportation and Public Utilities Group for Outstanding Contributions to Scholarship, The Henry Edward Salzberg Honorary Award from Syracuse University for Outstanding Achievement in the Field of Transportation, and the Burton Gordon Feldman Award for Distinguished Public Service from Brandeis University; and was elected to membership in the American Academy of Arts and Sciences and Vice President of the American Economic Association. He has been a regular commentator on PBS's "The Nightly Business Report."

He has testified before many U.S. Senate and House Committees, the Federal Power Commission, the Federal Energy Regulatory Commission and numerous state regulatory bodies.

Professor Kahn's publications include Great Britain in the World Economy; Fair Competition: The Law and Economics of Antitrust Policy (co-authored); Integration and Competition in the Petroleum Industry (co-authored); and The Economics of Regulation. He has written numerous articles which have appeared in The American Economic Review, The Quarterly Journal of Economics, The Journal of Political Economy, Harvard Law Review, Yale Journal on Regulation, Yale Law Journal, Fortune, The Antitrust Bulletin and The Economist, among others.

EDUCATION:

YALE UNIVERSITY Ph.D., Economics, 1942

UNIVERSITY OF MISSOURI Graduate Study, 1937-1938

NEW YORK UNIVERSITY M.A., Economics, 1937

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EMPLOYMENT:

1961-1974 1980-	NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. Special Consultant
1947-1989	CORNELL UNIVERSITY Assistant Professor; Associate Professor; Robert Julius Thorne Professor of Economics; Robert Julius Thorne Professor of Political Economy, Emeritus, 1989-; Chairman, Department of Economics; Dean, College of Arts and Sciences; on leave 1974-80.
Spring 1989	NEW YORK UNIVERSITY SCHOOL OF LAW Visiting Meyer Professor of Law
1978-1980 1978-1980 1977-1978 1955-1957 1943 1943 1942	UNITED STATES GOVERNMENT Advisor on Inflation to President Carter Chairman, Council on Wage and Price Stability Chairman, Civil Aeronautics Board Senior Staff, Council of Economic Advisors to the President U.S. Army, Private War Production Board Associate Economist, International Economics Unit, Bureau of Foreign and Domestic Commerce, Department of Commerce Associate Economist, Antitrust Division, U.S. Department of Justice
1974-1977	NEW YORK STATE PUBLIC SERVICE COMMISSION Chairman
1940, 1950-1951	BROOKINGS INSTITUTION Staff Economist
1945-1947	RIPON COLLEGE Assistant Professor, Chairman, Department of Economics TWENTIETH CENTURY FUND

1944-1945	Research Economist
1943-1944	COMMISSION ON PALESTINE SURVEYS Economist
1937-1938	UNIVERSITY OF MISSOURI Teaching Assistant

CONSULTANCIES AND PROFESSIONAL ACTIVITIES:

1994-1995	Antitrust Division, U.S. Department of Justice, on the application of Ameritech for waivers of the interexchange restrictions in the AT&T Modified Final		
	Judgment		
1994	American Airlines on code-sharing		
1993-1994	Court-appointed expert in State of New York v. Kraft General Foods, Inc., et		
	al., U.S. District Court, S.D.N.Y.		
1992	New Zealand Telecom on the progress of competition in New Zealand		
	telecommunications		
1992	Rochester Telephone Company on corporate restructuring and deregulation		
1992	Russian Government on economic reform		
1991	British Mercury on terms of competition with British Telecom		
1989	City of Denver on charging and financing of Stapleton Airport		
1988-1990	Attorneys General, New York and Pennsylvania, on airline mergers		
1985	Attorney General, State of Illinois, on Illinois Bell rates		
1981-1984	City of Long Beach, California, the Coca-Cola Company and American Airlines		
	on antitrust litigation		
1981-1997	Economic commentary, Nightly Business Report (PBS)		
1980-1982	Advisor to Governor Carey on Telecommunications Policy		
1968	Ford Foundation		
1966	National Commission on Food Marketing		
1965,1974	Federal Trade Commission		
1963-1964	Antitrust Division, Department of Justice		
1960-1961	U.S. Department of Agriculture		
1957-1961	Boni Watkins, Jason & Co.		
See also the list of testimony below.			

MEMBERSHIPS:

1992-1994	Member, New York State Telecommunications Exchange
1992-1993	Member, Ohio Blue Ribbon Panel on Telecommunications Regulation
1991-	Board of Editors, Review of Industrial Organization
1990-1992	Chairman, International Institute for Applied Systems Analysis Advisory
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1986	Governor Cuomo's Advisory Panel on public power for Long Island